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EnviroNews

REFRIGERANT MANAGEMENT

One area covered under the Clean Air Act (CAA) is ozone-depleting substances (ODS). This includes certain refrigerants and halon fire suppression systems. The regulations require that you properly use, store, handle and dispose of ODS and maintain certain records. The records document compliance with the regulations. There are different requirements based on what type of refrigerant.

Motor Vehicle Air Conditioners (MVAC)

One of the largest uses of CFC-12, trade name Freon, in the United States is in motor vehicle air conditioners. The Environmental Protection Agency (EPA) has been given the authority to establish requirements to prevent the release of refrigerants during the servicing of MVACs and to require the recycling of refrigerants.

Technicians who repair or service MVAC with CFC-12 must be trained and certified by an EPA-approved organization. Technicians must use equipment to recover or recycle the CFC-12 that is approved and certified by the EPA. Service shops must maintain records of the name and address of any facility to which the refrigerant is sent. Records of training must also be maintained on site.

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IN THE NEWS

David Jenkins of Shafmaster Fishing Company in Lee, New Hampshire faces a penalty of five years in jail and a $250,000 fine for ordering employees to illegally vent 2,300 pounds of the refrigerant HCFC-22 after employees had properly collected the refrigerant.

Taken from Environmental Compliance Alert, April 15, 2003.

NONPOINT SOURCE POLLUTION

Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands coastal waters, and even underground drinking water sources.

Sources of NPS pollution include: runoff from urban streets, parking areas, rooftops; runoff from lawns and gardens that contain heavy metals, nutrients, sediments, toxic chemicals and bacteria; sediments, pesticides, herbicides, nutrients and bacteria from agriculture activities; and airborne pollution from automobiles and industries.

NPS pollution can also be caused by natural sources. There is always runoff, erosion, and sedimentation from undisturbed land.

States report to the Environmental Protection Agency that NPS pollution is the leading remaining cause of water quality problems. The effects of NPS on waters vary and may not be fully assessed. It has been determined that the pollutants do have harmful effects on drinking water supplies, recreation, fisheries and wildlife.

Everyone contributes in some way to NPS pollution. Municipal officials in Massachusetts have the authority to initiate and enact local land use bylaws and controls to address NPS pollution in their communities.

REGULATORY UPDATE

EPA is extending by 18 months the compliance dates for its August 16, 2002 Spill Control and Countermeasures (SPCC) Plan rule. Facilities amending existing plans must now do so by August 17, 2004, with full implementation required by February 18, 2005.

From the April-May 03 Massachusetts EnvironManagement Report

Refrigerants

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Air-conditioning and Refrigeration Equipment

Section 608 of the CAA established regulations that require service practices that maximize recycling of ozone-depleting compounds during the servicing and disposal of air-conditioning and refrigeration equipment. In addition the Act set certification requirements for recycling and recovery equipment, technicians and reclaimers. Refrigerants are only sold to certified technicians.

The full regulation of Section 608 of the CAA is located under 40 Code of Federal Regulations Part 92, Subpart F. The regulation details all of the requirements including the prohibition on venting, record keeping requirements, leaks and other pertinent information.

FYI – The DEP's fines help stop 160 tons of hazardous pollutants from entering the air and led to the conservation of 5.4 million gallons of water.

FOR YOUR INFORMATION

Home Energy Audits

A home energy audit is the first step in determining how much energy your home consumes. It can also help with an evaluation of measures that can be taken to make your home more energy-efficient. An audit can show problems that, when corrected, can save you significant amounts of money. You can pinpoint where your house is losing energy. An audit will also determine the efficiency of your home's heating and cooling system. You can perform an audit yourself or have a professional energy auditor carry out a more thorough audit.

Do-It-Yourself Audits

When conducting an audit on your own you should keep a checklist of areas that you have inspected and note any problems that you have found. The following items should be checked:

1.) Locating Air Leaks – Make a list of obvious air leaks. The potential savings from draft reduction ranges from 5% to 30% per year.

2.) Insulation – Check to see if the level of the attic and wall insulation of your home is at least at the minimum recommended amount.

3.) Heating/Cooling Equipment – Inspect heating and cooling equipment annually. Have a professional check and clean your equipment once a year. If the unit is more than 15 years old you should consider replacing it with a newer more energy efficient model.

4.) Lighting – Examine the wattage size of the light bulbs you use.

Professional Energy Audits

All professional energy audits should include at a minimum a walkthrough as discussed above and a blower door test.

1.) Blower Door Test – These tests determine the air infiltration rate of a building.

2.) Thermographic Inspection – This may be used to detect thermal defects and air leakage in building envelopes.

Massachusetts is one of the few remaining states that by law requires electric and gas utilities to provide home energy audits to customers on demand, paid for by a surcharge on energy bills.

EnviroQuestion

Question:
Can you guess how much the Department of Environmental Protection (DEP) collected in administrative penalties in FY02?

Answer in the next issue.

Quarter 1 Question: What is nonpoint source pollution?

Answer: Nonpoint source pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources.

(See article on page 1 for more information)